

In the claims:

Substitute the following claims for the claims currently on file.

1. Cancel claim 1
2. Cancel claim 2
3. Cancel claim 3
4. Cancel claim 4
5. Cancel claim 5
6. Cancel claim 6
7. Cancel claim 7
8. Cancel claim 8
9. Cancel claim 9
10. Cancel claim 10
11. (Currently Amended) Apparatus, comprising:
  - an advanced trigger module, for generating ~~at least a first advanced trigger event~~ indicator a plurality of trigger condition indicative signals in response to trigger events occurring in at least one input signal;
  - a multiplexer, for receiving from said advanced trigger module each of a said plurality of trigger condition indicative signals and selecting therefrom one of said trigger condition indicative signals for further processing; and
  - an event counter module, for counting the number of said ~~at least first trigger events~~ said selected trigger condition indicative signals occurring during a predefined time period to establish thereby a rate of occurrence of said ~~at least first event~~ selected trigger condition indicative signals.

12. Cancel claim 12

13. (Currently Amended) The apparatus of claim 11, further comprising:

a time stamp module, for associating at least some of ~~said trigger event~~ occurrences of ~~at least one trigger condition~~ said selected trigger condition indicative signals with a respective time stamp for subsequent processing by said display processor.

14. (Currently Amended) The apparatus of claim 13, wherein each of said ~~trigger events~~ selected trigger condition indicative signals is associated with a time stamp.

15. The apparatus of claim 11, further comprising:

a time stamp module, for associating at least some of ~~said trigger event~~ occurrences of ~~at least one trigger condition~~ said selected trigger condition indicative signals with a respective time stamp for subsequent processing by a fast Fourier transform(FFT) module;

said FFT module for processing at least one time stamp associated trigger ~~occurrence~~ condition indicative signal to provide thereby a spectral profile of occurrences of said trigger event.

16. The apparatus of claim 11, wherein said trigger event comprises at least one of a glitch condition, a pulse width violation condition, a slew-rate violation condition, a runt condition, a time-qualified runt condition, an abnormal pulse condition, a time-qualified abnormal pulse condition, a timeout condition, a window criteria condition, a set-up and hold violation, a logic pattern, a logic state and an edge condition.

17. Cancel claim 17.

18. The apparatus of claim 15, further comprising:

an auxiliary trigger module, for asserting a trigger condition in response to a spectral profile correlating to a predefined spectral profile within a threshold level of accuracy.